C-3.2 Interpret the names and formulas for ionic and covalent compounds.

Revised Taxonomy Level 2.1 B Interpreting conceptual knowledge

In Physical Science Students

- Predict the ratio by which the representative elements combine to form binary ionic compounds, and represent that ratio in a chemical formula. (PS-4.5)

It is essential for students to

- Name and write the chemical formulas for binary molecular compounds
- Name and write the chemical formulas for ionic compounds including those that contain common polyatomic ions
- Identify substances as molecular or ionic compounds
- Compare molecular and ionic compounds according to their properties
- Differentiate and write molecular formulas, empirical formulas and structural formulas

Assessment

Since the verb for this indicator is interpret (represent) the major focus of assessment will be for students to "change from one form of representation to another". In this case, write the name of a chemical compound when given the formula, or write the formula when given the name. As this indicator is classified as conceptual knowledge, it is vital that students understand the protocol for naming and writing the formulas for chemical substances and can apply their knowledge of chemical nomenclature to any chemical formula or name of a chemical compound or substance.